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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,220	08/20/2001	Mitko G. Mitev	10012237-1	6401

7590 09/19/2005

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EXAMINER	
KIM, CHONG R	
ART UNIT	PAPER NUMBER
2623	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/933,220	MITEV ET AL.	
	Examiner	Art Unit	
	Charles Kim	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7,9,11-13,16-20,22-26 and 30-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7,9,11-13,16-20,22-26 and 30-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 2, 2005 has been entered.

Response to Amendment and Arguments

2. Applicant's amendment filed on April 1, 2005 has been entered and made of record.

3. Applicant's arguments, see pages 10-13, with respect to the rejection(s) of claim(s) 1, 3-5, 7, 9, 11-13, 16-20, 22-26, 30, 31 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the combination of Brownlee, U.S. Patent No. 6,282,303 ("Brownlee") and Yamada et al., U.S. Patent No. 6,560,612 ("Yamada"), the details of which are provided below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3-5, 7, 9, 11-13, 16-20, 22-26, 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Brownlee, U.S. Patent No. 6,282,303 ("Brownlee") and Yamada et al., U.S. Patent No. 6,560,612 ("Yamada").

Referring to claim 1, Brownlee discloses a user interface (1120) for use with a computer including a display, comprising:

a. an at least partially transparent roller (1110) [col. 4 line 66-col. 5, line 25 and figure 11];

b. a sensor system, associated with the transparent roller, operable in a first mode to sense the image of a fingerprint and operable in a second mode to sense the rotational motion of the roller (col. 4, lines 15-col. 5, line 25).

Brownlee does not explicitly disclose a touch pad adjacent to the roller. Note that the transparent roller in Brownlee's system is implemented on the lower portion of a keyboard, directly underneath the spacebar (figure 11). The Examiner notes that touch pads located at the lower portion of a keyboard were exceedingly well known in the art. For example, Yamada discloses a touch pad (11) implemented on the lower portion of a keyboard (figure 1), wherein the touch pad is adapted to move a pointer on a display (col. 4, lines 19-40).

Brownlee and Yamada are combinable because they are both concerned with user interface systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the keyboard of Brownlee so that it includes the touch pad of Yamada at the lower portion of the keyboard. The suggestion/motivation for doing so would

have been to enhance the flexibility of the user interface system by providing the user with the capability of selecting various configurations selectively to satisfy functional and personal preferences. Therefore, it would have been obvious to combine Brownlee with Yamada to obtain the invention as specified in claim 1. Note that the combination of Brownlee and Yamada provides a keyboard that includes the transparent roller (1110 in figure 11) of Brownlee adjacent to the touch pad (11 in figure 1) of Yamada.

Referring to claim 3, Brownlee discloses that the user interface further comprises a (keyboard) button (figure 11).

Referring to claim 4, Brownlee discloses that the user interface further comprises a pair of (keyboard) buttons located on opposite sides of the roller (figure 11).

Referring to claim 5, Brownlee discloses that the user interface further comprises a plurality of keys together defining a keyboard (figure 11). Brownlee does not explicitly disclose that the roller is located between the touch pad and the keyboard. However, the combination of Brownlee (figure 11) and Yamada (figure 1) disclose a user interface that includes a roller that is located between a touch pad and the keyboard.

Referring to claim 7, Brownlee further discloses that the sensor system includes a light sensor and a light source that emits light which passes through the roller (col. 3, lines 11-42 and figure 2).

Referring to claim 9, Brownlee discloses a user interface for use with a computer including a display, comprising:

a. an at least partially transparent roller (203, 1110) [col. 3, lines 11-42 and figures 2 and 11];

b. a light source (215) that emits light which passes through the roller [col. 3, lines 11-42 and figure 2];

c. a light sensor (223) that receives reflected light [col. 3, lines 11-42 and figure 2];

d. a rotational motion sensor associated with the roller that senses rotational motion of the roller (col. 3, lines 43-65);

e. a control system, associated with the light source, light sensor and rotational motion sensor, the control system being operable in a first mode to enable operation of the light source, light sensor and rotation motion sensor (col. 5, line 26-col. 6, line 33, more specifically col. 6, lines 8-33) and operable in a second mode to enable operation of the rotation motion sensor and disable operation of at least one of the light source and at least a portion of the light sensor (col. 5, lines 26-40, more specifically lines 39-40).

Brownlee does not explicitly disclose a touch pad adjacent to the roller. Note that the transparent roller in Brownlee's system is implemented on the lower portion of a keyboard directly underneath the spacebar (figure 11). The Examiner notes that touch pads located at the lower portion of a keyboard were exceedingly well known in the art. For example, Yamada discloses a touch pad (11) implemented on the lower portion of a keyboard (figure 1), wherein the touch pad is adapted to move a pointer on a display (col. 4, lines 19-40).

Brownlee and Yamada are combinable because they are both concerned with user interface systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the keyboard of Brownlee so that it includes the touch pad of Yamada at the lower portion of the keyboard. The suggestion/motivation for doing so would have been to enhance the flexibility of the user interface system by providing the user with the

capability of selecting various configurations selectively to satisfy functional and personal preferences. Therefore, it would have been obvious to combine Brownlee with Yamada to obtain the invention as specified in claim 9. Note that the combination of Brownlee and Yamada provides a keyboard that includes the transparent roller (1110 in figure 11) of Brownlee adjacent to the touch pad (11 in figure 1) of Yamada.

Referring to claim 11, see the rejection of at least claim 3 above.

Referring to claim 12, see the rejection of at least claim 4 above.

Referring to claim 13, see the rejection of at least claim 5 above.

Referring to claim 16, Brownlee discloses a computer system, comprising:

a. a display (col. 7, lines 42-43);

b. a user interface including an at least partially transparent roller (col. 3, lines 11-42 and figures 2 and 11);

c. an image sensor associated with the roller that senses the image of a fingerprint and generates fingerprint image data (col. 3, lines 11-42 and figure 2);

d. a rotational motion sensor associated with the roller that senses rotational motion of the roller and generates roller motion data (col. 3, lines 43-65);

e. a control system associated with the image sensor and rotational motion sensor, the control system being operable in a first mode to convert the fingerprint image data and rotational motion data into data representative of the scanned fingerprint (col. 4, lines 15-36), and operable in a second mode to control an operation of the computer system in response to the roller motion data (col. 4, lines 40-56 and col. 7, lines 14-20).

Brownlee does not explicitly disclose a touch pad adjacent to the roller. Note that the transparent roller in Brownlee's system is implemented on the lower portion of a keyboard directly underneath the spacebar (figure 11). The Examiner notes that touch pads located at the lower portion of a keyboard were exceedingly well-known in the art. For example, Yamada discloses a touch pad (11) implemented on the lower portion of a keyboard (figure 1), wherein the touch pad is adapted to move a pointer on a display (col. 4, lines 19-40).

Brownlee and Yamada are combinable because they are both concerned with user interface systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the keyboard of Brownlee so that it includes the touch pad of Yamada at the lower portion of the keyboard. The suggestion/motivation for doing so would have been to enhance the flexibility of the user interface system by providing the user with the capability of selecting various configurations selectively to satisfy functional and personal preferences. Therefore, it would have been obvious to combine Brownlee with Yamada to obtain the invention as specified in claim 16. Note that the combination of Brownlee and Yamada provides a keyboard that includes the transparent roller (1110 in figure 11) of Brownlee adjacent to the touch pad (11 in figure 1) of Yamada.

Referring to claim 17, Brownlee further discloses that the control system comprises at least one processor (figure 6).

Referring to claim 18, Brownlee further discloses a computer housing in which the processor is located (col. 1, lines 26-44. Note that the laptop computer in line 29 comprises a computer housing).

Referring to claim 19, Brownlee further discloses that the display is pivotably connected to the computer housing (col. 1, lines 26-44. Note that the laptop computer in line 29 comprises a display pivotably connected to the computer housing).

Referring to claim 20, Brownlee does not explicitly disclose that the user interface is mounted on the computer housing. However, this feature was exceedingly well known in the art. For example, Yamada discloses a user interface that is mounted on a computer housing (figure 1). Therefore, it would have been obvious to combine Brownlee and Yamada, for the reasons stated above (claim 16).

Referring to claim 22, Yamada further discloses that the user interface includes right and left click buttons (12, 13) and the touch pad is located between the right click and left click buttons and the space bar (figure 1). As noted above, Brownlee explains that the roller is positioned directly underneath the space bar. Therefore, the combination of Brownlee and Yamada disclose a touch pad (11) that located between the right click and left click (12, 13) buttons and the roller (1110).

Referring to claim 23, see the rejection of at least claim 5 above.

Referring to claim 24, Brownlee further discloses a light source that emits light which passes through the roller and a light sensor that receives light reflected through the roller (figure 2).

Referring to claim 25, Brownlee further discloses that the control system disables at least one of the light source and at least a portion of the light sensor in the second mode (col. 5, lines 39-40).

Referring to claim 26, Brownlee further discloses that the operation of the computer system comprises a scrolling operation (col. 4, lines 40-56).

Referring to claims 30, 31, see the rejection of at least claim 22 above.

Referring to claim 32, Brownlee further discloses that the roller comprises a scroll roller (col. 7, lines 39-43).

Referring to claims 33-34, see the rejection of at least claim 32 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 571-272-7421. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ck
September 12, 2005

SAMIR AHMED
PRIMARY EXAMINER